

It is true that in those cases where the disease has become dessiminated throughout the body, and has taken the miliary form, at autopsy the pulmonary lesions can often be shown to antedate those in other organs; but autopsies, except in such generalized cases, are not commonly obtainable. Clinicians agree that the utmost reliance can be placed upon the von Pirquet and tuberculin tests for determining the presence of a tuberculous lesion; but whether it is active, latent, or healed can only be decided by clinical examination. Any enquiry then into the proportion of children, other than those with known tuberculous disease, who give a positive reaction to these tests proves of value in determining the frequency of tuberculosis early in life in the cities of this continent as compared with those of the old world.

Working amongst the same class of patient as those from which the Vienna statistics were compiled, namely the, poorer classes of society, Veeder and Johnston obtained a very much smaller percentage of positive results. Of 1,321 children from a few months up to fourteen years of age, the percentage rises gradually from 1·5 in children under twelve months to 36 per cent, for the period of ten to fourteen years, when recognized clinical cases of tuberculosis are excluded; and to 44 per cent. when cases of clinical tuberculosis are included. Hamburger and Monti obtained a positive result in 94 per cent. of children between these ages and von Pirquet 80 per cent. though the latter used only the test which bears his name. As in both the Vienna and St. Louis cases all the children on whom the tests were made were in hospital for some pathological condition, the percentage of children in the whole community infected with tuberculosis is probably much less than these figures indicate.

DETERMINATION OF SEX

SELECTIVE reproduction was a simple matter to Deucalion and Pyrrha. Their method is set forth without impropriety in the school books. But so far both science and imag-

ination have searched in vain for the pebbles which they used. Plausibly infallible receipts for producing male or female offspring at will have never been lacking, but not one has long survived the test of independent research or unprejudiced practical application. The rules are empirical, and the data on which they are based are inaccurate or insufficient. Moreover, the uncertainty of so many factors such as the relation between ovulation and menstruation, and the interval between insemination and fertilization, leaves a loophole for escape from whatever objections may be urged against any hypothesis, which, in fact, nothing but a large body of reliable statistics could prove. After all, the chances of a successful prognosis of sex are mathematical, and practically even.

The modern scientific theories of sex fall into two groups, the physiological and the morphological. In the former group the nutritional theories are not at present in favour, but an interesting correlation of sex with metabolism is attracting attention. It is evident that throughout nature, male characteristics are preponderatingly active and catabolic; female characteristics on the other hand, are passive and anabolic. A book by Dr. T. E. Reed, published last year,* formulates an ingenious method of voluntary selection of sex on this basis. He has found that there is a definite lunar rhythm to be observed not only in menstruation, the classical example, but in many other functions, particularly in the fluctuation of the temperature and other symptoms in the course of the infectious diseases, and in the progress of labour. In labour the rhythm, Dr. Reed believes, is tidal, approximately six hours, a catabolic active period being followed by an anabolic period of rest. His obstetric records led him from this to the idea that the ovum has this same rhythm, and if fertilized during the catabolic phase, for instance, will result in a male. Moreover, these tidal periods are coincident in all persons in the same locality; conse-

*Sex: Its Origin and Determination. Rebman Company.

quently the theory can be put to the test; and the author claims to have had it tested successfully. In a word, prospective parents who may have a preference as to the sex of their offspring, are recommended to be ruled by the tide-tables for their latitude, if the intricacies of the more accurate Nautical Almanac are beyond their comprehension!

Passing to the morphological data, we leave the theories of voluntary selection and are on the more scientific ground of the biologist. But here, too, the findings of one observer contradict those of another, and what is true of many species does not always apply to another. Montgomery in reviewing the morphological data, which have accumulated rapidly of late, comes to the following conclusions: Each ovum has a prospective sex, which *may* be reversed by the entrance of the sperm. The sperm is thus a disturbing factor, sex-changing, rather than sex-producing, and probably acts by modifying the metabolism of the egg rather than by transmitting any particular sex-determinants. But what gives the ovum its prospective sex? From all this one is left with the impression that girl-babies will continue to be born, even in Asia, for many years to come.

It is the intention to establish medical boards in each divisional area of the country in connexion with the branch of the Militia Department charged with the allotment of pensions. In case of death, it is a comparatively easy matter to grant a pension as the amount is determined by the rank of the deceased and the number of those who were dependent upon him. In the case of disabled soldiers the matter is more difficult for the sum granted is then determined by the extent of the injuries received; this will be determined by the medical board.

A LEPER colony is to be established in Illinois at one of the State Hospitals for the Insane. Although there are only a few